

Abstract of the Disclosure

A system and method for performing parallel data compression which processes stream data at more than a single byte or symbol (character) at one time. The parallel compression engine modifies a single stream dictionary based data compression method to provide scalable, high bandwidth compression. The parallel compression method examines a plurality of symbols in parallel, thus providing improved compression performance. Several types of devices and components are described that may include the parallel compression engine. Several devices are described that may include the parallel compression engine, including intelligent devices, network devices, adapters and other network connection devices, consumer devices, set-top boxes, digital-to-analog and analog-to-digital converters, digital data recording, reading and storage devices, optical data recording, reading and storage devices, scanners with optical character recognition, solid state storage devices, processors, bus bridges, memory modules, and cache controllers.